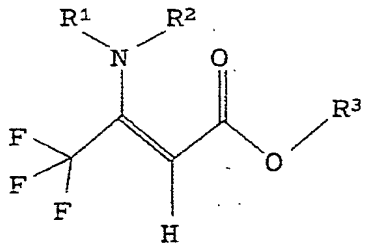
Abstract

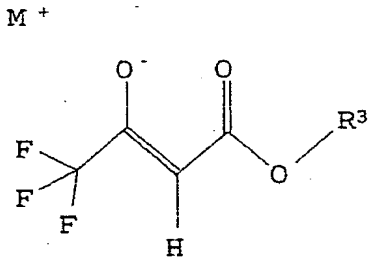
A process is described for preparing 3-amino-4,4,4-trifluorocrotonic esters of the formula (I) or the E/Z isomers or tautomeric forms thereof



(I)

where R^1 and R^2 are each independently hydrogen, an optionally substituted linear C_1-C_4-alkyl radical or an optionally substituted benzyl radical and R^3 is methyl or ethyl, which comprises

a) reacting an alkyl trifluoroacetate with an alkyl acetate of the formula CH_3-CO-OR^3 and an alkali metal alkoxide to give an enolate of a trifluoroacetoacetic ester of the formula (II)



(II)

where M is sodium or potassium and R^3 is as defined above, and subsequently

b) allowing the alkali metal enolate of the trifluoroacetoacetic ester from stage a) to react without further purification directly with an amine of the formula NHR^1R^2 in the presence of an acid to give the 3-amino-4,4,4-trifluorocrotonic ester.

With the aid of this two-stage process, the 3-amino-4,4,4-trifluorocrotonic esters can be prepared in high yields without significant by-products.